What is claimed is:

1. An isolated nucleic acid molecule which encodes immunoglobulin receptor, Immunoglobulin superfamily Receptor Translocation Associated, IRTA, protein.

2. The isolated nucleic acid molecule of claim 1, wherein the IRTA protein is IRTA1 protein comprising the amino acid sequence set forth in Figure 18A (SEQ ID NO:1). 90 nk (515 aa)

3. The isolated nucleic acid molecule of claim 1, wherein the IRTA protein is IRTA2 protein comprising the amino acid sequence set forth in Figures 18B-1-18B-3 (SEQ ID NO:3). 90 nk (977)

4. The isolated nucleic acid molecule of claim 1, wherein the IRTA protein is IRTA3 protein comprising the amino acid sequence set forth in Figures 18C-1-18C-2 (SEQ ID NO:5). 519 aa (734)

5. The isolated nucleic acid molecule of claim 1, wherein the IRTA protein is IRTA4 protein comprising the amino acid sequence set forth in Figures 18D-1-18D-2 (SEQ ID NO: 7). 728 aa (524)

6. The isolated nucleic acid molecule of claim 1, wherein the IRTA protein is IRTA5 protein comprising the amino acid sequence set forth in Figures 18E-1-18E-2 (SEQ ID NO: 9). 591 (339)

7. An isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule is DNA.

8. The isolated DNA molecule of claim 2, wherein the DNA is cDNA.

9. The isolated DNA molecule of claim 2, wherein the DNA is genomic DNA.

10. The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule is an RNA molecule.

11. The isolated DNA molecule of claim 2, wherein the DNA molecule is cDNA having the nucleotide sequence set forth in Figure 18A (SEQ ID NO:2).

12. The isolated DNA molecule of claim 2, wherein the DNA molecule is cDNA having the nucleotide sequence set forth in Figure 18A (SEQ ID NO:4).

13. The isolated DNA molecule of claim 2, wherein the DNA molecule is cDNA having the nucleotide sequence set forth in Figure 18A (SEQ ID NO:6).

14. The isolated DNA molecule of claim 2, wherein the DNA molecule is cDNA having the nucleotide sequence set forth in Figure 18A (SEQ ID NO:8).

15. The isolated DNA molecule of claim 2, wherein the DNA molecule is cDNA having the nucleotide sequence set forth in Figure 18A (SEQ ID NO:10).

16. The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule encodes a human IRTA1 protein.

17. The isolated nucleic acid molecule of claim 1 operatively linked to a promoter of DNA transcription.

18. The isolated nucleic acid molecule of claim 17, wherein the promoter comprises a bacterial, yeast, insect, plant or mammalian promoter.

19. A vector comprising the nucleic acid molecule of claim 17.

20. The vector of claim 19, wherein the vector is a plasmid.

21. A host cell comprising the vector of claim 20.

22. The host cell of claim 21, wherein the cell is selected from a group consisting of a bacterial cell, a plant cell, and insect cell and a mammalian cell.

23. An isolated nucleic acid molecule comprising at least 15 contiguous nucleotides capable of specifically hybridizing with a unique sequence included within the sequence of the isolated nucleic acid molecule encoding IRTA1 protein of claim 1.

24. The isolated nucleic acid molecule of claim 23 labeled with a detectable marker.

25. The nucleic acid molecule of claim 24, wherein the detectable marker is selected from the group consisting of a radioactive isotope, enzyme, dye, biotin, a fluorescent label or a chemiluminescent label.

26. A method for detecting a B cell malignancy or a type of B cell malignancy in a sample from a subject wherein the B cell malignancy comprises a 1q21 chromosomal rearrangement which comprises:

a) obtaining RNA from the sample from the subject;

b) contacting the RNA of step (a) with a nucleic acid molecule of at least 15 contiguous nucleotides capable of specifically hybridizing with a unique sequence included within the sequence of an isolated RNA encoding human IRTA protein selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5, under conditions permitting hybridization of the RNA of step (a) with the nucleic acid molecule capable of specifically hybridizing with a unique sequence included within the sequence of an isolated RNA encoding human IRTA protein, wherein the nucleic acid molecule is labeled with a detectable marker; and

c) detecting any hybridization in step (b), wherein detecion of hybridization indicates presence of B cell malignancy or a type of B cell malignancy in the sample.

27. The method of claim 26, wherein the detectable marker is radioactive isotope, enzyme, dye, biotin, a fluorescent label or a chemiluminescent label.

28. The method of claim 26, wherein the B cell malignancy is selected from the group consisting of B cell lymphoma, multiple myeloma, Burkitt's lymphoma, marginal zone lymphoma, diffuse large cell lymphoma and follicular lymphoma cells.

29. The method of claim 28, wherein the B cell lymphoma is Mucosa-Associated-Lymphoid Tissue B cell lymphoma (MALT).

30. The method of claim 28, wherein the B cell lymphoma is non-Hodgkin's lymphoma.

31. An antisense oligonucleotide having a sequence capable of specifically hybridizing to an mRNA molecule encoding a human ITRA protein so as to prevent overexpression of the mRNA molecule.

32. The antisense oligonucleotide of claim 31, wherein the ITRA protein selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5 protein.

33. A purified IRTA1 protein comprising the amino acid sequence set forth in Figure 18A (SEQ ID NO:1).

34. The purified IRTA1 protein of claim 33, wherein the IRTA1 protein is human IRTA1.

35. A purified IRTA2 protein comprising the amino acid sequence set forth in Figures 18B-1-18B-3 (SEQ ID NO:3).

36. The purified IRTA2 protein of claim 35, wherein the IRTA2 protein is human IRTA2.

37. A purified IRTA3 protein comprising the amino acid sequence set forth in Figures 18C-1-18C-2 (SEQ ID NO:5).

38. The purified IRTA3 protein of claim 37, wherein the IRTA3 protein is human IRTA3.

39. A purified IRTA4 protein comprising the amino acid sequence set forth in Figures 18D-1-18D-2 (SEQ ID NO: 7).

40. The purified IRTA4 protein of claim 39, wherein the IRTA4 protein is human IRTA4.

41. A purified IRTA5 protein comprising the amino acid sequence set forth in Figures 18E-1-18E-2 (SEQ ID NO: 9).

42. The purified IRTA5 protein of claim 41, wherein the IRTA5 protein is human IRTA5.

43. An antibody directed to a purified IRTA protein selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5.

44. The antibody of claim 43, wherein the IRTA protein is human IRTA protein.

45. The antibody of claim 43, wherein the antibody is a monoclonal antibody or a polyoclonal antibody.

46. The antibody of claim 43, wherein the monoclonal antibody is a murine monoclonal antibody or a humanized monoclonal antibody.

47. The antibody of claim 43, wherein the antibody is conjugated to a therapeutic agent, wherein the therapeutic agent is selected from the group consisting of a radioisotope, a toxin, a toxoid, or a chemotherapeutic agent.

48. A pharmaceutical composition comprising an amount of the antibody of claim 43 effective to bind to cancer cells expressing an IRTA protein selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5 so as to prevent growth of the cancer cells and a pharmaceutically acceptable carrier.

49. The pharmaceutical composition of claim 48, wherein the cancer cells are selected from the group consisting of B cell lymphoma, a mantle cell lymphoma multiple myeloma, Burkitt's lymphoma, marginal zone lymphoma, diffuse large cell lymphoma and follicular lymphoma cells.

50. The pharmaceutical composition of claim 49, wherein the B cell lymphoma cells are Mucosa-Associated-Lymphoid Tissue B cell lymphoma (MALT) cells.

51. The pharmaceutical composition of claim 49, wherein the B cell lymphoma cells are non-Hodgkin's lymphoma cells.

52. A pharmaceutical composition comprising an amount of the oligonucleotide of claim 31 effective to prevent overexpression of a human IRTA protein and a pharmaceutically acceptable carrier.

53. A method of diagnosing B cell malignancy which comprises a 1q21 chromosomal rearrangement in a sample from a subject which comprises:

a) obtaining the sample from the subject;

b) contacting the sample of step (a) with the antibody of claim 43 capable of specifically binding with a human IRTA protein selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5 IRTA protein on a cell surface of a cancer cell under conditions permitting binding of the antibody with human IRTA protein on the cell surface of the cancer cell, wherein the antibody is labeled with a detectable marker; and

c) detecting any binding in step (b), wherein detecion of binding indicates a diagnosis of B cell malignancy in the sample.

54. The method of claim 53, wherein the B cell malignancy is selected from the group consisting of B cell lymphoma, multiple myeloma, Burkitt's lymphoma, mantle cell lymphoma, marginal zone lymphoma, diffuse large cell lymphoma and follicular lymphoma.

55. The method of claim 54, wherein the B cell lymphoma is Mucosa-Associated-Lymphoid Tissue B cell lymphoma (MALT).

56. The method of claim 54, wherein the B cell lymphoma is non-Hodgkin's lymphoma.

57. A method of treating a subject having a B cell cancer which comprises administering to the subject an amount of anti-IRTA antibody effective to bind to cancer cells expressing an IRTA protein selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5 so as to prevent growth of the cancer cells and a pharmaceutically acceptable carrier, thereby treating the subject.

58. The method of claim 57, wherein the anti-IRTA antibody is a monoclonal antibody.

59. The method of claim 58, wherein the monoclonal antibody is a murine monoclonal antibody or a humanized monoclonal antibody.

60. The method of claim 57, wherein the anti-IRTA antibody is a polyoclonal antibody.

61. The method of claim 57, wherein the B cell cancer is selected from the group consisting of B cell lymphoma, multiple myeloma, mantle cell lymphoma, Burkitt's lymphoma, marginal zone lymphoma, diffuse large cell lymphoma and follicular lymphoma.

62. The method of claim 61, wherein the B cell lymphoma is Mucosa-Associated-Lymphoid Tissue B cell lymphoma (MALT).

63. The method of claim 61, wherein the B cell lymphoma is non-Hodgkin's lymphoma.

64. A method of treating a subject having a B cell cancer which comprises administering to the subject an amount of the oligonucleotide of claim 31 effective to prevent overexpression of a human IRTA protein, so as to arrest cell growth or induce cell death of cancer cells expressing IRTA protein(s) and a pharmaceutically acceptable carrier, thereby treating the subject.

65. The method of claim 64, wherein the IRTA protein is selected from the group consisting of human IRTA1, IRTA2, IRTA3, IRTA4 and IRTA5 protein.

66. The method of claim 64, wherein the B cell cancer is selected from the group consisting of B cell lymphoma, mantle cell lymphoma, multiple myeloma, Burkitt's lymphoma, marginal zone lymphoma, diffuse large cell lymphoma and follicular lymphoma.

67. The method of claim 66, wherein the B cell lymphoma is Mucosa-Associated-Lymphoid Tissue B cell lymphoma (MALT).

68. The method of claim 66, wherein the B cell lymphoma is non-Hodgkin's lymphoma.